

**Notice of Allowability**

Application No.

09/697,365

Examiner

Rachna Singh

Applicant(s)

MASUI, TOSHIYUKI

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Request for Reconsideration filed 10/15/04.
2. ☒ The allowed claim(s) is/are 1-37.
3. ☒ The drawings filed on 05 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 10/15/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 03/03/05
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Thomas Basso on 3/2/05.
3. The application has been amended as follows:
  1. (Currently amended) A computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string, comprising:
    - displaying means for displaying characters and images;
    - inputting means for inputting a character string in a document forming area in the display means;
    - storage means having stored therein the multimedia information at least including a figure, image information, speech information and the moving picture information;
    - a word dictionary in which reading data is associated with a displayed character and further the reading data is associated with a multimedia information identifier representing the multimedia information to be displayed;
    - a multimedia information registration table in which a keyword associated with reading data in the word dictionary is associated with the multimedia information identifier; and
    - retrieving means for executing forward coincidence retrieval on reading data of

said word dictionary, with an undefined character as a retrieving condition, from one new character inputting processing by said inputting means to another, wherein

if the multimedia information identifier is included in data extracted from the word dictionary as a result of retrieval by said retrieving means, the multimedia information as determined based on said multimedia information identifier is extracted from said storage means for demonstration on said display means as selectable conversion candidate data.

2. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 further comprising:

an exemplary sentence dictionary in which a defined character is associated with reading data of a character most likely to be input next to said defined character and with a display character associated with said reading data and in which reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

said retrieving means executing retrieval of a defined registered character of said exemplary sentence dictionary or forward coincidence retrieval of said defined registered character with the registered reading data, using the defined character or the combination of said defined character with an undefined character as a retrieving condition; wherein

if there is included a multimedia information identifier in data extracted from the exemplary sentence dictionary as a result of retrieval by said retrieving means, the multimedia information indicated by said multimedia information identifier is extracted from said storage means for demonstration as selectable conversion candidate data on said display means.

3. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein said multimedia information registration table includes multimedia information access data, in association with each multimedia information identifier, for accessing the multimedia information stored in said storage means;

said multimedia information access data including data for specifying storage means having the multimedia information stored therein.

4. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein

said storage means having the multimedia information stored therein is storage means accessible over a network.

5. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein

said multimedia information registration table is configured for being associated with one or more keywords in association with respective multimedia information identifiers.

6. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein

said multimedia information registration table is configured for making various modifications, such as addition, deletion or correction of registered data and wherein the various modifications, such as addition, deletion or correction of registered multimedia information identifiers or keywords in said multimedia information registration table are reflected in corresponding registered data of said word dictionary so that similar modifications are made in said word dictionary.

7. (Currently amended) The computer-implemented document editing processing apparatus according to claim 2 wherein

said multimedia information registration table is configured for making various modifications, such as addition, deletion or correction of registered data and wherein the various modifications, such as addition, deletion or correction of registered multimedia information identifiers or keywords in said multimedia information registration table are reflected in corresponding registered data of said exemplary sentence dictionary so that similar modifications are made in said exemplary sentence dictionary.

8. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein

said conversion candidate data are represented in a document forming area of said display means or in the vicinity thereof as a set of plural conversion candidate data not exceeding N which is a pre-set display number, and wherein conversion candidate words or conversion candidate multimedia information selected from the displayed conversion candidate data are displayed as defined data in a document input position in the document forming area.

9. (Currently amended) The computer-implemented document editing processing apparatus according to claim 1 wherein said word dictionary is configured for dynamically changing the registration sequence of registered data, said word dictionary being also configured so that, if data is selected as document component data in document forming processing, the relevant data in said word dictionary is moved to the leading end;

said retrieving means being configured for sequentially retrieving said word dictionary beginning from the leading end thereof.

10. (Currently amended) The computer-implemented document editing processing apparatus according to claim 2 wherein said exemplary sentence dictionary is configured for dynamically changing the registration sequence of registered data, said word dictionary being also configured so that, if data is selected as document component data in document forming processing, the relevant data in said exemplary sentence dictionary is moved to the leading end; said retrieving means being configured for sequentially retrieving said exemplary sentence dictionary beginning from the leading end thereof.

11. (Currently amended) A computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

storage means having stored therein the multimedia information at least including one of a figure, the image information, speech information and the moving picture information so that said multimedia information can be extracted depending on a filename;

a word dictionary in which reading data is associated with display characters;

dictionary retrieving means for executing forward coincidence retrieval on reading data of said document dictionary, using an undefined character as a retrieving condition, from one new character inputting processing by said inputting means to another;

file retrieving means for executing forward coincidence retrieval on filenames of said storage means, using an undefined character as a retrieving condition, from one new character inputting processing by said inputting means to another; wherein

data extracted from said document dictionary as a result of retrieval by said dictionary retrieving means and multimedia information extracted from said storage means as a result of retrieval by said file retrieving means are displayed on said displaying means as selectable conversion candidate data.

12. (Currently amended) The computer-implemented document editing processing apparatus according to claim 11 wherein

retrieving processing of a document dictionary by said dictionary retrieving means and retrieving processing of a file of said storage means by said file retrieving means are executed in parallel.

13. (Currently amended) The computer-implemented document editing processing apparatus according to claim 11 wherein said document dictionary is constituted by plural different document dictionaries, and wherein there are provided plural dictionary retrieving means for executing retrieval of said plural document dictionaries, the retrieving processing of document dictionaries by said plural dictionary retrieving means being executed in parallel.

14. (Currently amended) The computer-implemented document editing processing apparatus according to claim 11 wherein said storage means having said multimedia information stored therein is storage means accessible over a network.

15. (Currently amended) The computer-implemented document editing processing apparatus according to claim 11 wherein said conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming areas of said display means or in the vicinity thereof, said N being a pre-set number of displayed data, conversion candidate words or the conversion candidate multimedia information as selected from the displayed

conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

16. (Currently amended) A computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

a multimedia dictionary in which reading data is associated with displayed characters and in which the reading data is associated with the multimedia information containing at least one of the reading data, figure, image information, speech information and the moving picture information; and

retrieval means for executing forward coincidence retrieval on the reading data of said multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting at means to another;

at least one of the displayed characters or the multimedia information extracted from said multimedia dictionary as a result of retrieval by said retrieval means being displayed as selectable conversion candidate data in said display means.

17. (Currently amended) The computer-implemented document editing processing apparatus according to claim 16 wherein said multimedia dictionary having said multimedia information as recording data is stored in storage means accessible over a network.

18. (Currently amended) The computer-implemented document editing processing apparatus according to claim 16 wherein said conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming areas of said display means or in the vicinity



thereof, said N being a pre-set number of displayed data, conversion candidate words or the conversion candidate multimedia information as selected from the displayed conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

19. (Currently amended) A computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

a multimedia dictionary in which reading data is associated with displayed characters and in which the reading data is associated with the multimedia information containing at least one of the reading data, figure, image information, speech information and moving picture information, or address data having stored therein said multimedia information;

storage means having stored therein the multimedia information containing at least one of the reading data, figure, image information, speech information and moving picture information so that said multimedia information can be extracted depending on addresses; and

retrieval means for executing forward coincidence retrieval on the reading data of said multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting at means to another;

at least one of the displayed characters or the multimedia information extracted from said multimedia dictionary as a result of retrieval by said retrieval means and data extracted from said storage means based on the address data extracted from said

multimedia dictionary being displayed as selectable conversion candidate data in said display means.

20. (Currently amended) The computer-implemented document editing processing apparatus according to claim 19 wherein said storage means having the multimedia information is accessible over a network.

21. (Currently amended) The computer-implemented document editing processing apparatus according to claim 19 wherein said conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data, conversion candidate words or the conversion candidate multimedia information as selected from the displayed conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

22. (Currently amended) A document editing processing method in a computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, and storage means having stored therein the multimedia information including at least one of a figure, image information, speech information and the moving picture information, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a retrieving step of executing forward coincidence retrieval on reading data of

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a word dictionary, based on the retrieving condition as set at said retrieving condition setting step, said word dictionary being such a one in which the reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

a multimedia information extracting step of extracting from said storage means the multimedia information determined based on said multimedia information identifier when said multimedia information identifier is included in data extracted from the word dictionary in said retrieval step; and

a display step for displaying the multimedia information extracted at said multimedia information extracting step as selectable conversion candidate data on said display means.

28. (Currently amended) A document editing processing method in a computer-implemented document editing processing apparatus for preparing a document by the inputting of a character string including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, a word dictionary having reading data associated with characters to be displayed, and storage means having stored therein the multimedia information including at least one of a figure, image information, speech information and the moving picture information so that said multimedia information can be extracted responsive to a filename, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on

reading data of the document dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another;

a file retrieving step of executing forward coincidence retrieval on filenames of said storage means, with the undefined character as the retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said document dictionary as a result of said dictionary retrieving step and the multimedia information extracted from said storage means as a result of said file retrieving step.

32. (Currently amended) A document editing processing method in a computer-implemented document editing processing apparatus including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, and a multimedia dictionary having reading data associated with a displayed character and having the reading data associated with multimedia information containing at least one of a figure, image information, speech information and the displayed character, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said multimedia dictionary as a result of said dictionary retrieving step as selectable conversion

candidate data on said display means.

34. (Currently amended) A document editing processing method in a computer-implemented document editing processing apparatus including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, a multimedia dictionary having reading data associated with a displayed character and having the reading data associated with multimedia information containing at least one of a figure, image information, speech information and the moving picture information, and storage means having stored therein the multimedia information containing at least one of a figure, image information, speech information and the moving picture information so that said multimedia information can be extracted responsive to an address, said method comprising:

- a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

- a dictionary retrieving step of executing forward coincidence retrieval on reading data of the multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another; and

- a displaying step of demonstrating the display character or the multimedia information extracted from said multimedia dictionary as a result of said dictionary retrieving step or data extracted from said storage means based on address data extracted from said multimedia dictionary as selectable conversion candidate data on said display means.

36. (Currently amended) ~~A program furnishing medium for tangibly furnishing a~~ A computer program for executing document editing processing on a computer system, said computer program including

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a retrieving step of executing forward coincidence retrieval on reading data of a word dictionary, based on the retrieving condition as set at said retrieving condition setting step, said word dictionary being such a one in which the reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

a multimedia information extracting step of extracting from said storage means the multimedia information determined based on said multimedia information identifier when said multimedia information identifier is included in data extracted from the word dictionary in said retrieval step; and

a display step for displaying the multimedia information extracted at said multimedia information extracting step as selectable conversion candidate data on said display means.

37. (currently amended) ~~A program furnishing medium for tangibly furnishing a~~ A computer program for executing document editing processing on a computer system, said computer program including

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the document dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another;

a file retrieving step of executing forward coincidence retrieval on filenames of said storage means, with the undefined character as the retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said document dictionary as a result of said dictionary retrieving step and the multimedia information extracted from said storage means as a result of said file retrieving step.

### **Reasons for Allowance**

4. The following is an examiner's statement of reasons for allowance:

In reference to claims 1, 16, 19, 22, 32, 34, and 36, none of the references, either singularly or in combination, teach or fairly suggest a retrieving means for executing forward coincidence retrieval on reading data with an undefined character as a retrieving condition from one new character inputting processing by inputting a character string in the document forming area or displaying multimedia information as selectable conversion candidate data based on the result of the forward coincidence retrieval .

Shaw teaches retrieving multimedia representation for each instance of the text; however, he does not teach executing a forward coincidence retrieval with an undefined character as the retrieving condition, using a registration table in which a keyword is associated with reading data, or that the multimedia data is displayed as selectable conversion candidate data.

Izumi teaches a display control device for displaying data containing both textual and/or drawing data; however, he does not teach a forward coincidence retrieval with an

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undefined character as the retrieving condition, using a registration table in which a keyword is associated with reading data, or that the multimedia data is displayed as selectable conversion candidate data.

Cannon teaches a system for indexing and retrieving graphic and sound data by allowing a user to supply descriptors and relevant words; however, he does not disclose a forward coincidence retrieval with an undefined character as the retrieving condition, using a registration table in which a keyword is associated with reading data, or that the multimedia data is displayed as selectable conversion candidate data.

Shimada discloses a data conversion apparatus included an information input device, a holder for holding information designating a method of the conversion processing from input portion when the kind of the input information is examined and is judged as predetermined data for executing a data conversion processing, a convertor for executing the data in accordance with a predetermined rule, a synthesizer for generating new data by combining the input information with a predetermined data content, and an information output device for outputting the new data so generated; however, he does not disclose a forward coincidence retrieval with an undefined character as the retrieving condition, using a registration table in which a keyword is associated with reading data, or that the multimedia data is displayed as selectable conversion candidate data.

Philyaw teaches a window containing a data entry field into which the user enters the character string, the character string disassociated from an address of the destination server. The character string is then transmitted from the software interface



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either directly to the ARS or indirectly to the ARS through a communication package resident on the user computer. The ARS then performs a matching operation using the character string to obtain matching information from an ARS database. The matched information is then returned to the user computer and used to connect the user computer to the destination server. The destination server then returns the desired information to the user computer for presentation to the user. Philyaw does not teach forward coincidence retrieval with an undefined character as the retrieving condition, using a registration table in which a keyword is associated with reading data, or that the multimedia data is displayed as selectable conversion candidate data.

Therefore claims 1-37 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/3/05



SANJIV SHAH  
PRIMARY EXAMINER